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ABSTRACT

In an inquiry-oriented teacher education program, prospective teachers are encouraged to examine the origins and consequences of their actions and settings in which they work. Many of the characteristics of the elementary student teaching program at the University of Wisconsin at Madison are similar to this approach. During the students' 15-week field experience program, taken concurrently with a weekly half-day seminar, students conduct field-based inquiries under the direction of supervisors who are graduate students. The primary purpose of the seminar is to broaden students' perspectives and have them engage in reflective analyses of everyday occurrences. Students are encouraged to adopt a critical posture toward both the university and the school components of the field experience and to examine and debate issues and problems from diverse and multiple perspectives. Once in a work setting, the inquiry-oriented approach can help alleviate teacher stress caused by a sense of loss of control over professional responsibilities. This "deskilling" process can be halted by empowering teachers with the ability to reflect upon, confront, and change job-embedded and structural sources of discomfort. At the University of Wisconsin, the inquiry-oriented approach has required that pedagogy and classroom practices exemplify the quality of inquiry that is sought. Consequently, student teachers, cooperating teachers, supervising graduate students, and faculty are playing an increasingly greater role in determining the direction of their program. (FG)

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Activating Teacher Energy Through "Inquiry-Oriented" Teacher Education

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A paper presented at the annual meeting of the Association of Teacher Educators, Phoenix, Arizona, February, 1982.

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This paper will examine the assumptions and practices of an approach to teacher education that emphasizes the development of inquiry about teaching and about the contexts in which teaching is embedded. Prior to discussing the constitutive elements of this approach an attempt will be made to distinguish "inquiry-oriented" teacher education from three other general approaches to the education of teachers. Then following an examination of the "inquiry-oriented" paradigm and a specific application of this orientation in a student teaching program at the University of Wisconsin, "inquiry-oriented" teacher education will be discussed in relation to the phenomenon of teacher stress.

Specifically, it will be argued that skill in inquiry (e.g., critical thinking) is an important element in determining the potential for teachers to cope with and to overcome several specific probelms posed by their work environments and that "inquiry-oriented" teacher education, unlike many other responses to the problem of teacher stress, seeks to empower teachers to directly confront and resist (rather than adapt to) significant sources of stress within their work settings. Finally, several problems related to the implementation of an "inquiry-oriented" student teaching program will be discussed together with specific strategies that have been developed and employed in one institution to counteract the forces which mitigate against an "inquiry-oriented" approach.

Ideology and Teacher Education

> All teacher education is a form of ideology. Each program is related to the educational ideology held by a particular teacher educator or teacher education institution, even though this relationship may not be made explicit. There is no such thing as a

> value free teacher education just as there is no such thing as a value free education for children. (Spodek, 1974, pp. 8-9)

Since the inception of formal programs for the preparation of teachers in the early part of the nineteenth century, there has been a great deal of controversy and debate surrounding the ways in which teachers should be prepared.[1] While much of this debate has occured among advocates of different general orientations to the education of teachers ("Humanistic" vs. C.B.T.E. approaches), others have argued for and against strategies for educating teachers within the parameters of a single general orientation. Acknowledging for a moment that each general approach to teacher education is in itself very diverse and that differences within approaches may in fact be as significant if not more significant than differences between approaches,[2] there seem to be at least four major orientations that have dominated the discourse of debate in recent years. Before examining in some detail one of these four approaches, "inquiry-oriented" teacher education, we will now briefly examine a few of the core assumptions about teacher education, teaching and teachers of the other three approaches: "Behavioralistic teacher education," "Personalistic teacher education," "Traditional-Craft teacher education."

"Behavioralistic" teacher education

> The Metaphor of Production: The curriculum is the means of production, and the student is the raw material which will be transformed into a finished and useful product under the control of a highly skilled technician. The outcome of the production process is carefully plotted in advance according to rigorous design specifications, and when certain means of production prove to be wasteful, these are disguarded in favor of more efficient ones. Great care is taken so that raw materials of a particular quality or composition are channeled into the proper production systems

> and that no potentially useful characteristic of the raw material is wasted. (Kliebard, 1972, p. 403)

The first and probably most significant of the general approaches to the education of teachers rests upon the foundations of a positivistic epistemology and behavioralistic psychology and emphasizes the development of specific and observable skills of teaching which are assumed to be related to student learning.[3] As Kliebard (1973) points out, this orientation has been present in one form or another since at least the turn of the century. The emergence of C/PBTE in the 1960's is clearly the most recent and most influential manifestation of this perspective in the U.S. While there is a great deal of diversity among the advocates of "Behavioralistic" approaches to teacher education,[4] there is at the same time a common thread that links together all of the many variations within this orientation and that distinguishes this general approach from those to be discussed shortly.

Specifically, the skills, knowledge and competencies to be taught to prospective teachers are specified in advance and the criteria by which success is to be measured or made explicit. Furthermore, performance at a prespecified level of mastery is assumed to be the most valid measure of teacher competence. The fact that the same behavior can be governed by quite different motives and that radically different behaviors can be governed by the same motives not addressed. The development of the teacher as a person over and above mastery of skills of teaching and content knowledge and the desire to have teachers reflect upon the purposes and consequences of their work (e.g., in terms of such issues as social continuity and change) or not central concerns of those who advocate this view.

Underlying this orientation to teacher education is a view of teaching

as an "applied science" and of the teacher as primarily an executor of the "laws" of effective teaching (Tom, 1980a). Prospective teachers may or may not proceed through the curriculum at their own pace and may participate in varied or standardized learning activities, but that which they are to master, the ends of teacher education, are fully determined in advance by others. The prospective teacher is viewed as a passive recipient of professional knowledge and skill and plays little if any part in controlling the substance of his or her preparation.

This orientation clearly falls within the "technical" tradition of teacher education identified by Borrowman (1956) where the primary concern is with fostering the development of skill in the actual performance of a predetermined task. Whether a task is worth pursuing and the appropriateness of the contexts in which the task is to be pursued are not considered.

"Personalistic" teacher education

> The Metaphor of Growth: The curriculum is the greenhouse where students will grow and develop to their fullest potential under the care of a wise and patient gardener. The plants that grow in the greenhouse are of every variety, but the gardener treats each according to its needs, so that each plant comes to flower. This universal blooming cannot be accomplished by leaving some plants unattended. All plants are nurtured with great solitude, but no attempt is made to divert the inherent potential of the individual plant from its metamorphesis or development to the whims and desires of the gardener. (Kliebard, 1972, p. 403)

The second major approach to teacher education rests upon the foundations of a phenomenological epistemology and perceptual and developmental psychologies and subsumes several more specific strategies such as "Humanistic Teacher Education" (Combs et al., 1974); "Personalized Teacher Education" (Fuller, 1974);

"Deliberate Psychological Education" (Sprenthall and Sprenthall, in press); and several approaches to constructing a teacher education program that are based upon the principles of "open education" (Crook, 1974). This paradigm, like the "Behavioralistic" one, is very diverse.

For example, advocates of "Personalized Teacher Education" contend that the content of a teacher eudcatio. program should be based upon and matched with the self-perceived needs and concerns of prospective teachers and have constructed a developmental model of teacher concerns which is used to conceptualize the design of teacher education programs. On the other hand, advocates of "Deliberate Psychological Education" have applied cognitive-developmental theories to the design of teacher education programs and posit their goals for teacher education from the characteristics of the more advanced stages of one or more cognitive-developmental theories. Finally, advocates of "Humanistic Teacher Education" have constructed their view of teacher education upon the principles of perceptual psychology and seek to develop the "self" of the teacher in a manner that is consistent with a set of empirical findings related to the belief systems of "effective" helpers in a number of occupations.

While the differences among these specific approaches are by no means trivial,[5] all of these strategies hold several assumptions in common about the proper focus for a teacher education program, about the task of teaching and about teachers. Specifically, all of the many varieties within the "Personalistic" paradigm seek to promote the psychological maturity of prospective teachers and emphasize the reorganization of perceptions and beliefs over the mastery of specific behaviors, skills and content knowledge. Consequently, the knowledge and skills that prospective teachers are to

master are rarely defined in advance to the extent that is the case in many "Behavioralistic" approaches to teacher education.

The behaviors of teachers and the environments they create are assumed to be largely the result of the particular meanings and purposes of teachers and the specification of a particular set of behaviors for all teachers to master is viewed as antithetical to the development of competent teachers. "Requiring a teacher education program to define precisely the behaviors it hopes to produce may be the surest way to destroy the effectiveness of its products" (Combs, 1972, p. 288). The concern here is as much with the quality of experience and with the meaning of behavior as with the outcome of behavior and it is not assured that similar behavioral expressions by different people necessarily have similar meanings.[6]

According to this view, teacher education is seen as a form of adult development, a process of "becoming" rather than as a process of merely educating someone about how to teach. The central although not the only problem in this paradigm is to bring about appropriate shifts in perceptions and meanings (e.g., about themselves as teachers and about their relationships with children) rather than the mastery of behaviors and content knowledge that are specified in advance. Competence in teaching is equated with psychological maturity, however defined, and prospective teachers are encouraged to find their own best ways to function as teachers.

All of these approaches attempt to be responsive to prospective teachers' own definitions of their learning needs and the teacher is viewed as an active agent in determining the substance and direction of his or her own professional education. Finally, growth toward pyschological maturity is not viewed as an inevitable process, but is seen instead as a development that must be

stimulated by a secure and supportive learning environment.

"Traditional-Craft" teacher education

> We can know more than we can tell.
> (Polayni, 1966, p. 4)

The third general approach to teacher education is one which is based on a conception of teaching as a craft and of teachers as craftspersons. As Tom (1980b) points out, this orientation has had few proponents since the normal school era of teacher education because of the dominance of "behavioralistic" conceptions of teacher education and of attempts to "professionalize" the occupation of teaching through the codification of knowledge about effective teaching. According to this view, knowledge about teaching is accumulated largely by trial and error and is stored in the minds of "master" teachers. It is further assumed that much of this knowledge is tacit and not ameniable to the kind of specification that is attempted in "behavioralistic" approaches such as C.B.T.E.

As Tom (1980b) points out, crafts entail elaborate sequences of skills that the craftsperson learns how to routinize. However, mastery of these technical skills is a necessary but not sufficient condition for becoming a good craftsperson because teaching like any complex sequence of activites entails what Scheffler (1960) refers to as "inexhaustive rule structures."

> The application of routinized skill sequences to practical problems may fail to bring about desired results. Since rule structures are inexhaustive, judging what should be done through a careful analysis of the immediate situation is of key importance as is the capacity to carry out whatever plan of action the analysis indicates is most likely to succeed. (Tom, 1980, p. 318)

According to this view, the whole is more than the sum of the parts and mastery of a repetoire of technical skills of teaching does not guarantee

that the novice will be able to make proper judgments about what ought to be done in a particular situation. "A good fisherman knows how to find and tempt fish, not just how to crank them into the boat" (Tom, 1980b, p. 320). In fact, Polayni (1966) argues that close scrutiny of the particulars of a comprehensive entity runs the risk of destroying the conception of the entity itself.

The central problem of teacher education from this point of view is to bring to focal awareness the subsidiary knowledge that constitutes good practice and a master-apprentice relationship is seen as the proper form for this "cultural knowledge" of good teachers to be transmitted to the novice. Despite the reluctance of university teacher educators to affiliate themselves with this conception of teacher education, the "traditional-craft" orientation is still alive and well in U.S. teacher education today in the form of the typical student teaching experience. Although there has been much rhetoric concerning the value of a laboratory conception of student teaching, there is also substantial evidence that Dewey's (1904) characterization of the field-experience as an apprenticeship is the modal pattern in the U.S. today (Zeichner, 1980).

"Inquiry-oriented" teacher Education

> The proper role of the formal education of teachers is to help persons develop their capacities to see their classroom behavior in the perspectives of culture and time, from the point of view of historical and contemporary others, thereby clarifying for themselves and others the alternatives for action. The structural features of institutions for the education of teachers, including staffing policies, selection of knowledge, arrangement of learning environments and the pedagogical strategies of the instructors, are means towards this end.

> The entire program, all courses and practical experiences, should provide the aspiring and experienced teacher with access to persons (faculty members, teachers, colleagues, and other persons) who can help initiate and sustain a process of critical inquiry (Berlak and Berlak, 1981, p. 252).

The final orientation to teacher education to be explored in the present paper is one which prioritizes the development of inquiry about teaching and about the contexts in which teaching is carried out. This focus on fostering the development of the orientations and skills of critical inquiry does not imply that technical skill in teaching is somehow unimportant. On the contrary, the assumption underlying this approach to teacher education is that technical skill in teaching is to be highly valued not as an end in itself, but as a means for bringing about desired ends. Questions about what ought to be done take on primary importance and the process of critical inquiry is viewed as a necessary supplement to the ability to carry out the tasks themselves.

As Wehlage (1981) correctly points out, there has been a long history in U.S. teacher education of efforts to promote the development of "inquiry-oriented" teacher education. Conceptualizations have been developed and programs have been implemented which have had as their central aim the development of "habits of inquiry." For example, there have been proposals for the development of "teacher innovators" (Joyce, 1972), "students of teaching" (Strickler, 1966), "teacher scholars" (Stratemeyer, 1956), "teachers as inquirers" (Bagenstos, 1975), "teachers as problem-solvers" (Joyce and Harrotunian, 1964), "teachers as action researchers" (Corey, 1953), "teachers as participant observers" (Salzillo and Van Fleet, 1977) and "self-monitoring teachers" (Elliot, 1976-77). Although these proposals differ substantially

on their definitions of inquiry, they all represent attempts to prepare teachers who have the skills to do and the inclination and skill to analyze what they are doing in terms of its effect upon both children and society.

As Feiman (1980) points out, this orientation views the teacher as an active agent in his or her own preparation for teaching and assumes that the more a teacher is aware of the origins and consequences of his or her actions and of the realities that constrain, the greater the likelihood that he or she can control and change both the actions and the constraints. While not naively ignoring the role that both internal and institutional dynamics play in shaping a teacher's actions, advocates of this position are concerned with helping teachers assume a greater role in shaping the direction of educational environments according to purposes of which they are aware and which can be justified in moral and ethical as well as in instrumental terms.

Underlying this approach to teacher education is a metaphor of liberation. As Siegel (1980, p.16) points out, a liberated person is one who is "free from the unwarranted control of unjustified beliefs, unsupportable attitudes and the paucity of abilities which can prevent that person from competently taking charge of his or her life." Because institutions by the very fact of their existence control human conduct by setting up predefined patterns of conduct which control it in one direction as against the many other directions that would theoretically be possible (Berger and Luchmann, 1977), and because as Sarason (1971) points out, this existing structure of a setting serves as a barrier to recognition and experimentation with alternative structures, prospective teachers (as is the

case with ourselves) often lose sight of the fact that the existing reality is only one of the many possible alternatives that could exist.

Given this notion of the objectification of everyday reality, the process of inquiry which forms the central component in this orientation requires that prospective teachers render as problematic that which is frequently taken for granted about the role of teacher, the task of teaching and about schooling in general. As prospective teachers begin to examine more carefully the origins and consequences of their actions and of the settings in which they work, questions such as the following begin to become of central importence: What knowledge should be taught and to whom? How should a teacher allocate his or her time to different children? To what extent should the personal knowledge that children bring to school be considered as a legitimate part of the school curriculum? How much control do and should teachers exert over determining what is taught in the classrooms, how it is to be taught and how it is to be evaluated? Somewhat more generally, students are encouraged to "bracket" and to examine carefully the rationales (educational or otherwise) and consequences of all that is imparted to them through the rituals and routines of both campus-based and school-based teacher education.

The fundamental task of teacher education from this point of view is to develop prospective teachers' capacities for <u>reflective action</u> and to help them to examine the moral, ethical, political as well as instrumental issues involved in their everyday thinking and practice. As is the case in the "Personalistic" paradigm, the knowledge and skills to be taught are not fully specified in advance and an attempt is made to respond to the needs and concerns of prospective teachers. However, while students play an active role in

determining the substance of their preparation for teaching, "meeting the needs" of prospective teachers is not the central concern. The teaching of technical skills associated with inquiry (e.g., observation) and the fostering of a disposition toward critical inquiry (a "critical spirit") becomes the axis around which the preparation revolves. The development of technical skill in teaching and the mastery of content knowledge is always addressed within this broader framework of critical inquiry and is viewed as a process of mastering the tools that will help bring about worthwhile ends.

The central question for both teacher educators and their students from this point of view is in determining which educational goals, educational experiences and institutional arrangements lead toward forms of life that are mediated by justice, equality and concrete happiness and existing practices within both the schools and university are scrutinized for their contributions to these ends. Maxine Greene (1978) succiently summarizes one of the basic rationales underlying this orientation to teacher education:

> If teachers today are to initiate young people into an ethical existence, they themselves must attend more fully than they normally have to their own lives and its requirements; they have to break with the mechanical life, to overcome their own submergence in the habitual, even in what they conceive to be virtuous and ask the 'why' with which all moral reasoning begins. (p. 46)

In sum, the "Behavioralistic," Personalistic," "Craft," and "Inquiry-Oriented" traditions seem to capture the bulk of general approaches that have dominated the discourse of debate in U.S. teacher education. It bears repeating that while the numerous variations within each paradigm are held together by a common set of core assumptions, each orientation in itself is also very diverse. It is also important to note that these orientations

are not viewed as necessarily synonamous with specific programs or institutions. In fact, as Atkins and Raths (1974), and Joyce et al. (1977) have pointed out, the most common pattern in the U.S. seems to be an eclectic one which incorporates elements from two or more general orientations into a single program. Furthermore, as Goodman (1982) and Zeichner and Tabachnick (1982) have shown, even where a program articulates a specific emphasis such as "inquiry-oriented" or "humanistic" the actual program often reflects a diversity of orientations as the diverse perspectives of specific individuals are brought to bear upon a supposedly unified program.

Finally, it needs to be emphasized that the identification of general orientations to teacher education is intended merely to convey the emphases and priorities within each approach. All orientations are concerned in some way with developing technical skill in teaching. All orientations are concerned with the reorginization of teacher perceptions and with fostering some form of inquiry or reflection about teaching. It is the set of priorities within which the other concerns are addressed that distinguishes one approach from another. The meaning of technical skill, inquiry, and personal development is clearly not the same within each of theses orientations, but to some extent all concerns are addressed within each approach. Acknowledging that neither a general approach nor a specific program reflects a unitary emphasis, we will now briefly examine the characteristics of one student teaching program which has attempted to affiliate itself with the "inquiry-oriented" tradition.

An "Inquiry-Oriented" Student Teaching Program

There are many avenues that could be pursued in an attempt to construct a student teaching program around the concept of "inquiry-oriented" teacher

education. For example, Salzillo and Van Fleet (1977) have made some interesting proposals for altering the ways in which students spend their time in the field. Specifically, they propose that the amount of time that students spend in teaching be greatly reduced and that a substantial portion of effort be devoted to studying the culture of the school and classroom and its relationship to the surrounding community. In this way it is argued, the school would no longer serve merely as a model for practice, but now would become a "social laboratory," itself an object of scrutiny and challenge. Through this kind of restructuring of the school-based experience of student teachers it is hoped that students will be more open to considering the range of possibilities that exist beyond what has been established in their own immediate settings and that they will become elaborators of culture rather than merely reproducers of culture.

Similarily, Friedenberg (1973, p. 35) argues in a proposal for student teachering not unlike that of Salzillo and Van Fleet's:

> A school is a marvelously revealing microsection of the society it serves. There is simply no better place to study the operations of social class, the dynamics of small groups, the influence of status on channels of communication, alienation and ritualized behavior, systems of social sanctions, other mechanisms for social control and the influence of ideology on perception. . . The whole assortment of social problems and social dynamics is there in small compass, laid out for participant observation. If practice teachers, in addition to their practice teaching, were directed to observe and discuss such phenomena as these in the context of the school and were evaluated on their astuteness in perceiving and analyzing them, there could be no question whatever of the value of field experience in their programs.

The elementary student teaching program at the University of Wisconsin-Madison is developing in a direction consistant with the recommendations of

Salzillo and Van Fleet and Friedenberg and in many respects falls within the rubric of "inquiry-oriented" teacher education.[7] Because the conceptual foundations and programmatic components of this program have been described elsewhere and in some detail (Zeichner, 1981; Grant and Zeichner, in press; Zeichner and Teitelbaum, in press) the present paper will only summarize the basic framework of this program.

Briefly and at the risk of oversimplification, this program is built upon a concept of "reflective teaching"[8] and attempts to initiate a concern and capacity for critical inquiry along with the typically more instrumental concerns of student teachers. There are two major components in the program: (1) a fifteen-week (4 1/2 days per week) field component; (2) a weekly 1/2 day seminar. As an example of what occurs during the field component of this program, the university graduate students who supervise the students and who also teach the seminar have required students to engage individually and collectively in what is referred to as "exercises in inquiry." These field studies are planned by the students around problems and issues that they and their supervisors have jointly agreed upon and are carried out along with the kinds of activities in which student teachers are typically involved (e.g., gradual assumption of more responsibility for planning, managing and instructing a class culminating in a period of total responsibility for the instructional program). Often times these field-based inquiries result in students leaving their classrooms and schools to conduct observations and interviews and they are often related to the readings that students complete in their seminars. Following is an example of a general format for an exercise in inquiry that is fairly typical of the kinds of field studies that student teachers conduct.

After the supervisor sets a broad problem for study either alone or in

collaboration with his or her students, the students would be asked to formulate specific questions to be addressed within the general area. For example, a supervisor might suggest an area such as control and autonomy in the work of teachers. Students might then be asked to interview and observe a variety of teachers who work in diverse settings and to conduct an inquiry around specific questions such as: How much and what kind of control do teachers have over what is taught, how it is taught and when in different kinds of settings at different grade levels and in different content areas? The goal of an exercise such as this would be for students to begin to draw conclusions about the dynamics of choice and constraint and to support their positions with case materials. The supervisor would facilitate the inquiries by possibly suggesting for example that students pay attention to both the formal and informal aspects of the settings they study and examine how teachers in different settings and teachers with different perspectives conform, adapt and alter the formal constraints within which they work. It goes without saying that a greater understanding of what is does not necessarily address what can and should be. However, a project like this would begin to supply the kinds of data that would be needed for a reasoned debate over what should be.

In addition to the inquiries which students conduct in the field they attend a weekly and largely campus-based seminar. Although this seminar is related to and in fact builds upon the students' classroom experiences, it is not primarily directed toward helping students solve their immediate classroom problems. On the contrary, the primary purpose of the seminar is to help broaden the students' perspectives and to have them momentarily detach themselves from their everyday existence in the schools so that they may

engage in a reflective analysis of the origins and consequences of their everyday patterns of thinking and acting of the taken-for-granted realities in their schools.

The particular issues that are discussed in the seminars are viewed as less important than the manner in which the issues are thought about and discussed. Consequently, there is a great deal of variation in the specific content that is covered in the various seminar sections now in operation and students are typically given a great deal of input into the selection of specific issues and problems for study. However, despite this diversity, there are several key elements that form the essential core of the seminar whatever the specific content that is addressed:

(1) Helping students to take a critical approach in the examination of educational issues and classroom problems (e.g., to become more aware of how cultural, institutional and psychological characteristics limit and make possible particular classroom practices).

(2) Helping students to see beyond the paradigms which circumscribe conventional educational thought (e.g. examining the "Tyler rationale" as only one of several alternatives for planning a curriculum).

(3) Helping students to develop a sense of the history of their own classrooms and to examine the rationales underlying classroom and school regularities (e.g., how and by whom and for what reasons was the existing curriculum developed in the students' classrooms?).

(4) Helping students to examine their own assumptions and biases that they bring to student teaching and how these effect their classroom practice (e.g., to think about how their own biographed histories including unique factors in their upbringing and school experience as pupils have affected

their thinking about teaching).

(5) Helping students to critically examine the processes of their own socialization as teachers (e.g., encouraging a critical posture toward the student teaching seminar itself).

It is important to point out that while throughout the seminar students are encouraged to adopt a critical posture toward both the university and school components of their experience, there is no conscious attempt to coerce students into adopting particular positions on educational issues or practices. Instead the emphasis in on encouraging reasoned and informed debate that requires students to examine issues and problems from multiple and diverse perspectives.

"Inquiry-Oriented" Teacher Education and the Phenomenon of Teacher Stress: The Argument in Brief

In the last decade or so teacher stress, alienation, boredom and burnout have undoubtedly received much attention in both the popular press and in the literature of education. Uppermost among the most visible sources of current discontent are the real and pressing concerns of teachers with financial and job security. Layoffs, involuntary transfers, relatively low salaries and status together with increasing public criticism and decreasing public support for schools are facts of life for many teachers in 1982. Along with the decreasing support for schools has come an increase in public calls for accountability and a general increase in the quantity of demands placed upon classroom teachers through the creation of legislation and regulations by all levels of school administration and government (Wise, 1979).

Additionally, an increase in societal and school related violence and student misbehavior and apathy are examples of other factors that are frequently cited as sources of teacher discontent in the ever growing body of literature in this area.

All of these factors are real and should not be minimized. However, amid all of this concern with the mental health of teachers, there has been minimal attention given to those aspects of stress emanating from the structure of the work place itself. Three Boston teachers have recently stated this omission clearly:

> We are concerned with the lack of attention being paid to the effects of the institutional structure of schools on teachers and the relationship between that structure and the structure of society (Friedman, 1980, p.2).

In other words, the literature on teacher stress, while focusing attention on numerous factors such as those cited above, has for the most part failed to consider the ways in which these factors have affected the structural characteristics of schools and the work of teachers and the ways in which these institutional dynamics are in turn related to teacher discontent. The educational literature on teacher stress has for the most part accepted the realities of teachers' situations as given and has sought to find ways to help teachers better cope and adapt to their existing realities and to find outlets for their frustrations.

This literature is filled with proposed solutions to the problems of discontent that fail to make problematic the immediate and structural conditions of the teacher's work. Taking mental health days, switching schools to alleviate boredom, better time management, counseling programs, stresslines, fitness, nutrition and exercise programs and developing new

outside hobbies and interests are examples of the kinds of strategies that have been proposed and which fall within the rubric of what can be termed "coping strategies."[9] Significantly, very few of these typically proposed solutions entail changes in the structural characteristics of schools or in the actual form of the work of teachers. In a sense these kinds of proposed solutions to the problems of teacher discontent while not inconsequential, represent another instance of the classic "blame the victim" syndrome. The institution itself remains unchallenged and most of the effort is devoted to changing individuals.

For many years various segments of the literature on the labor process within economics and sociology (e.g., Braverman, 1974, Edwards, 1979) have given serious attention to many of the relatively invisible and structurally located sources of worker discontent that have been largely ignored in the educational literature on teacher stress. It has only been recently that these kinds of "relational" analyses have been conducted with regard to the work of teachers (e.g., Apple, in press, Gitlin, in press). Following is a brief example of the kind of analysis that has been largely neglected in the literature on teacher stress and which leads to alternative and in this author's view more promising solutions to problems of teacher discontent.

According to Apple (in press) and Gitlin (in press) as schools have been rationalized in response to demands for greater accountability, the work of teachers has increasingly become segmented, routinized and "deskilled." As Apple (in press) points out, the process of "deskilling" involves:

> taking relatively complex jobs, jobs which require no small amount of skill and decision making and breaking them down into specified actions with specified results. . . so that the control of the work pace and outcome is enhanced. (p.8)

This process of the "deskilling" of teachers has been associated with the incorporation of controls into the physical structure of teachers' work.[10] All institutions, and schools are no exception, employ mechanisms of control to exact greater productivity from workers. That controls over the work of teachers exist is not surprising or especially revealing in itself. What is significant about the arguments of Apple and Gitlin is that the control mechanisms they identify do not merely emanate as is commonly thought from overt rules and hierarchial social relations (bureaucratic control) or from administrators merely telling teachers what to do (simple control). On the contrary, because the controls they identify are embedded into the very fabric of teachers' work they are less visible and less ameniable to challenge.

Both Apple (in press) and Gitlin (in press) cite numerous instances of the ways in which they see the intrusion of technical control into the lives of teachers. For example, they argue that curricular form (the way in which instruction is organized) is one of the structural characteristics of teachers' work that has changed in response to demands for greater accountability. Increasingly, as curricular form has been rationalized (e.g., through the ascendence of "pre-packaged" curricula and standardized testing), persons not in direct contact with a specific group of students have come to determine the curricular objectives, the content and pace of learning activities and the means of evaluation for these students. Correlatively, teacher control over these same aspects of their work has gradually eroded and teachers have increasingly been left in the role of executors of a curriculum that has been conceptualized by others. The extent to which teachers are able to employ personal discretion in determining the substance and direction of their day to day activities has minimized and control over the objectives, content,

pace and evaluation of the curriculum is enhanced.

Two points need to be made regarding the implications of this analysis. First, despite the contention that teachers have been "deskilled" in response to changes in curricular form, this point of view does not imply that teachers have passively accepted these changes. While there is some support in the literature that supports the "deskilling" argument (e.g., Gracey, 1972), there is also evidence, some of which is noted by Apple and Gitlin, that teachers covertly and overtly resist the imperatives of technical control.

Secondly, it should also be noted that the currently popular view of schools as "loosely coupled systems" (Weick, 1976) does not negate these arguments concerning the erosion of teacher control and in a sense supports the claims of those political economists such as Edwards (1979) who argue that there has been a general shift in the workplace from bureaucratic to technical modes of control. Weick (1976) largely refers to the strength of bureaucratic controls over teachers and does not address the extent to which technical control has intruded into teachers' work.

Accepting for a moment the general validity of these arguments concerning the erosion of teacher control over the conceptualization of the curriculum (a more subtle analysis of the complexities of these arguments is beyond the scope of this paper), we will now briefly examine the relevance of this "deskilling" process to problems of teacher discontent and the significance of "inquiry-oriented" teacher education as a response to this discontent.

First, despite the general lack of attention that has been given in the "teacher stress" literature to how <u>structural</u> characteristics of schools and

the work of teachers are related to the widespread nature of teacher discontent, there is some evidence that job stress in general is related to the structural characteristics of work settings and particularly that workers' sense of control over their work settings is an important factor in determining worker efficacy (Cherniss, 1980). Furthermore, with regard to schooling, a few studies have shown that teacher alienation is related to the structural characteristics of schools (Hoy, 1980) and that teachers' sense of control over their work is an important variable in determining the degree of alienation (Vavrus, 1979). If we truly want to "activate teacher energy" as the theme of this conference suggests, then we will need to move beyond total reliance on the kinds of "coping strategies" illustrated earlier. For while many of these proposals may serve to alleviate teacher discontent in the short run, they fail to address possibly some of the most significant sources of this discontent.

If those like Apple and Gitlin are correct and there is reason to believe their arguments are at least partially valid, then the discourse over alleviating teacher discontent needs to be broadened to include proposals that make the structural characteristics of the teacher's work problematic and open for change. Rather than merely finding ways to help teachers better adapt to situations where their autonomy has been minimized, we need to seek ways to help teachers gain more control over the actual conditions of their work and to enhance the potential for teachers to become significant participants in determining the direction of educational environments.

"Inquiry-oriented" teacher education as described in this paper is consistent with this position in that it seeks to empower teachers to

reflect upon, confront and possibly change job-embedded sources of discontent. While this strategy for educating teachers does not seek to "tear down" all that now exists, it is not directed at preparing teachers to better adapt and cope within an educational context that remains unchallenged. "Inquiry-oriented" teacher education, rather than turning teachers' attention away from the school, seeks to foster critical inquiry and action with regard to the kinds of school conditions that have been identified by Apple and Gitlin.

In suggesting "inquiry-oriented" teacher education as a worthwhile approach to problems of teacher discontent, we must be careful to maintain an awareness that critical reflection is not synonomous with the actual transformation of the concrete realities of schools and the conditions of the teachers' work. Clearly, more than awareness and good intentions are required to change school practices. Furthermore, teachers individually may be incapable of bringing about the kinds of structural changes that would alleviate some of their discontent. Much of this action may need to take place collectively for example, through union and school district negotiations over the conditions of teachers' work.

However, while analyzing the world is certainly no substitute for changing it, it can contribute toward that end. Given the dominance of "coping strategies" in proposals for alleviating teacher discontent, approaches like "inquiry-oriented" teacher education which seek to turn the attention of teachers toward the institutional dimensions of the problem need to become part of the search for solutions. Helping teachers to critically reflect upon the conditions of their work is a first and necessary step in the process of transforming those aspects of schools

that are sources of teacher discontent.

Problems Related to the Implementation of an "Inquiry-Oriented" Student Teaching Program.

In the last few years, the staff at Wisconsin has identified the following conditions as impeding the development of an "inquiry-oriented" student teaching program. These restraints will be only briefly outlined here and will be more fully explored in the discussion group for which this paper is intended.

First, the widespread acceptance of "behavioralistic" approaches to education and the increasing rationalization of schools and university teacher preparation programs through such accountability measures as competency testing for pupils and teachers, cost benefit analysis, MBO systems and funding policies based on student enrollments instead of program need (Wise, 1979) presents the greatest and most pervasive barrier to the implementation of an "inquiry-oreinted program. As Feiman (1978) points out:

> The conditions required to help teachers evaluate, understand and internalize new methods and materials may be incompatible, at least in the short run, with the conditions required to foster specific and measurable student outcomes. A commitment to foster teachers' understandings of needed changes cannot automatically guarantee specified observable behaviors on the part of teachers or students. (p. 19)

Clearly a natural tension exists between an approach to teacher education which seeks to promote "critical inquiry" and a general concern for normative questions of schooling on the one hand, and a dominant technocratic rationality which seeks to have teachers efficiently and effectively attain predetermined objectives within an institutional context that is taken for granted. Consequently, "inquiry-oriented" teacher education is sometimes viewed as

extraneous or even as counterproductive because it allegedly fails to equip teachers to cope with the everyday realities of school practice. Despite the fact that mastery of the craft of teaching is an integral component in an "inquiry-oriented" program, this conflict in the assumptions of "behavioralistic" and "inquiry-oriented" approaches together with the unquestionable dominance of a "behavioralistic" world view, serves to create an initial resistance to the implementation of "inquiry-oriented" programs.

The second problem associated with the implementation of an "inquiry-oriented" student teaching program is the defensiveness that this approach sometimes generates on the part of cooperating school personnel. Once student teachers are encouraged to take a "critical" stance toward existing school practice even if only to seek to understand the rationales and reasons underlying what is taken for granted, cooperating teachers and school administrators naturally become skeptical about the value of this approach. The term "critical" often connotes a negative or destructive intent while "reflection" is commonly viewed as impractical and as inhibiting action. Unless steps are taken to explicitly articulate the instrumental value and moral necessity of "critical reflection," the negative and common sense meaning of these terms is likely to complicate an already delicate partnership between schools and universities and to impede the implementation of an "inquiry-oriented" program.

Closely related to the previous issues is the widespread acceptance of the purpose of student teaching as an "apprenticeship." Despite abundant rhetoric in teacher education which is supportive of Dewey's (1904) conception of a "laboratory experience," there is a great deal of support <u>in practice</u> for an exclusive focus on instrumental concerns. Because of the

potency of the "apprenticeship" view, time taken for classroom observations, "exercises in inquiry" and for seminars is at least initially viewed as time taken away from the "more important" task of mastering the techniques of teaching despite efforts to legitimate the acquisition of this technique within a framework of critical inquiry.

Furthermore, student teachers themselves are likely to resist (at least initially) an emphasis on critical inquiry. Given the largely survival oriented concerns and utilitarian perspectives of many student teachers, a fact which has been fairly extensively documented in the literature (Fuller, 1969; Iannaccone, 1963), students are often skeptical of the value of critical inquiry into the purposes and consequences of their work and want to focus most if not all of their energies on that which they see as immediately useful. Since critical inquiry does not provide the kind of "recipe knowledge" that students often seek, it is frequently viewed as irrelevant to the every-day tasks of teaching. Here, as with cooperating school personnel, there is a need to clearly articulate the purposes and rationales for "critical inquiry" and to illuminate the value and necessity of taking such an approach to one's work as a teacher.

Finally, the successful implementation of an "inquiry-oriented" student teaching program requires that those who work with student teachers are themselves reflective about their work as teacher educators. As Berlak and Berlak (1981) point out, it is sometimes assumed that university teacher educators as a group are somehow more capable (than cooperating school personnel and students) of engaging in critical inquiry. Obviously this is not the case and deliberate efforts must be made to insure that those who work with student teachers within an "inquiry-oriented" program are both

reflective about their own work and capable of fostering critical inquiry on the part of students. Bureaucratic constraints related to the hiring of supervisors, the relatively low status of clinical programs within the university subculture, and the high turnover of supervisors in large institutions where programs are staffed largely by graduate students are just a few examples of the factors that make it difficult to initiate and sustain an "inquiry-oriented" student teaching program.

Programmatic Responses to the Constraints: The Wisconsin Experience

Following are examples of strategies employed in the Wisconsin student teaching program in an attempt to respond to the conditions described above. First, given the widespread acceptance of "behavioralistic" approaches to teacher education and schooling and of the student teaching experience as an exercise in apprenticeship, several different approaches have been employed in an attempt to foster a more open discussion of the focus of the program and of the value of this approach for prospective teachers. Conducting regular supervision workshops for cooperating teachers which deal explicitly with the underlying assumptions of the program and regular and continuing discussion of all aspects of the program in school-university advisory committees are two examples of our work in this regard.

Generally, cooperating teachers have taken an increasingly greater role in program development, implementation and evaluation and their support of the "inquiry-oriented" approach is viewed as essential in overcoming student teachers' initial resistances to critical inquiry. Closer involvement between school and university personnel in student teaching and open discussions of the sometimes conflicting perspectives about the purpose of the experience

has helped to alleviate some of the defensiveness that is naturally generated by an inquiry-oriented approach. While important differences still remain between school and university personnel about the ways in which student teachers should spend their time, cooperating teachers have increasingly provided support for the "inquiry-oriented" focus.

Secondly, several factors in addition to securing the support of cooperating teachers are seen as important in initiating and sustaining student teacher commitment to the process of critical inquiry. For example, there is a fundamental contradiction in attempting to provide an emancipatory learning experience through the use of conventional "top-down" instructional methods. The ultimate effect of this practice is to perpetuate an environment where relatively passive student teachers have little opportunity to think or question. Because "critical content" is no guarantee that students will think and act reflectively, an "inquiry-oriented" program requires a form of pedagogy and classroom social relations that exemplify the quality of inquiry that is sought.

Increasingly, student teachers in the Wisconsin program have played a greater role in determining the direction of both the field and campus components of their experience. Beginning with student teachers' everyday experiences and concerns and helping them to examine the particular commitments embedded in their classroom practice has been found to be a more productive approach than imposing a perspective which is initially viewed as divorced from practice. Student teachers participate along with their cooperating teachers and university supervisors in the negotiation of specific program requirements and select many of the particular issues and problems that are investigated in seminars and field-based "exercises in inquiry." Finally, an

attempt is made to foster a critical orientation toward the student teaching program itself. Typically, students begin the semester by openly discussing the value of critical inquiry and the purpose of student teaching and are encouraged to question and seek justification for all program requirements.

Finally, several efforts have been made to increase the liklihood that the graduate students who work with student teachers are both inclined toward and capable of critical inquiry. For example, all supervisors complete a graduate course in supervision which is taught by the program directors and come into the program aware of its emphasis on inquiry. Additionally, each semester regular staff meetings are held with supervisors and faculty in the program where an attempt is made to conduct the same kind of critical inquiry in relation to the curriculum of the program that is expected of students in the field. For example, during the last two semesters each supervisor has presented to the total group the rationales underlying his or her particular assignments for student teachers. As each supervisor's curriculum is critiqued in the group along with the general framework of an emphasis on inquiry, the program is revised. Clearly, if we wish student teachers to engage in critical inquiry, we must be equally reflective about our own actions as teacher educators.

Footnotes

[1]See Borrowman (1956) for a historical analysis of the debates over the liberal and technical functions of teacher education.

[2]Marshall (1981) makes this same point with regard to the characteristics of "open" approaches to classroom pedagogy. Further empirical support for the existence of diversity within paradigmatic approaches to teaching is provided by the studies of Bussis et al. (1976) and Berlak and Berlak (1981).

[3]Because of the existence of numerous descriptions and critiques of specific approaches associated with each of the paradigms to be discussed in the present paper, the problematic aspects of each orientation such as the fairly tenuous links between teacher competencies and student learning will not be explored.

[4]See for example the differences in the "behavioralistic" approaches to teacher education advocated by McDonald (1973) and Stevens (1976).

[5]For example, see Feiman and Floden (1980) for an analysis of some of the important distinctions between "personalized" teacher education and "Deliberate Psychological Education."

[6]See Bussis et al. (1976) for elaboration of this point of view and for an articulation of the symbolic interactionist assumptions associated with this view.

[7]The interested reader should examine the following sources for descriptions of "inquiry-oriented" teacher preparation programs which are similar in purpose to the Wisconsin Program: Cohn (1979), DesForges and McNamara (1979), Feiman (1979), Tom (1981), Wirth (1973), and Wright (1978).

[8]This notion of "reflective teaching" draws heavily but not exclusively upon the work of Dewey (1933) and upon the works of those like Bayles (1960) and

Feiman (1980) who have applied Dewey's ideas on reflective action to the pre-service and in-service education of teachers. Essentially this construct is analagous to the process of "critical reflection" described by Van Manen (1977) and by Berlak and Berlak (1981).

[9]The Fall 1980 issue of Action in Teacher Education provides many more examples of these "coping strategies" and is typical of the approach taken to the problems of teacher discontent by most educational scholars.

[10]Edwards has termed this type of control as technical control and distinguishes it from two other control mechanisms: bureaucratic control and simple control.

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